

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-46 (cancelled)

47. (new) A production method of a columnar electric device comprising at least the step of:

helically winding, onto a surface of a columnar body, a plate-like body formed by mutually joining and closely contacting one electroconductive linear body and one insulative linear body or semiconductor linear body.

48. (new) A production method of a columnar electric device comprising at least the steps of:

helically winding, onto a surface of a columnar body, a plate-like body formed by mutually joining and closely contacting a plurality of linear bodies;

removing a part of the linear bodies from the surface of the columnar body; and

coating an electroconductive substance or semiconductor substance onto the exposed surface of the columnar body.

49. (new) The production method of a columnar electric device of claim 48, further comprising the step of:

after the step of coating, removing at least a part of the linear bodies from the surface of the columnar body.

50. (new) A production method of a columnar electric device comprising at least the steps of:

helically winding, onto a surface of a columnar body, a plate-like body formed by mutually joining and closely contacting a plurality of insulative linear bodies;

removing a part of the linear bodies from the surface of the columnar body;

coating an electroconductive substance onto the exposed surface of the columnar body, to thereby form a first electroconductive wire;

removing at least a part of the linear bodies from the surface of the columnar body; and

coating an electroconductive substance onto the exposed surface of the columnar body, to thereby form a second electroconductive wire.

51. (new) The production method of a columnar electric device of claim 50, further comprising the steps of:

after the step of forming the second electroconductive wire, removing at least a part of the linear bodies from the surface of the columnar body; and

coating a semiconductor substance onto the exposed surface of the columnar body, to thereby form a semiconductor wire.

52. (new) The production method of a columnar electric device of claim 47, further comprising the step of:

before the step of winding the plate-like body, forming a semiconductor film or a laminated film of transparent electrode and semiconductor film, on the surface of the columnar body by coating.

53. (new) The production method of a columnar electric device of claim 51, further comprising the step of:

after the step of forming the semiconductor film or the semiconductor wire, achieving doping of the semiconductor film or the semiconductor wire while measuring an electrical property thereof by flowing electric current between the plurality of electroconductive wires.

54. (new) The production method of a columnar electric device of claim 52, further comprising the step of:

after the step of forming the semiconductor film or the semiconductor wire, achieving doping of the semiconductor film or the semiconductor wire while measuring an electrical property thereof by flowing electric current between the plurality of electroconductive wires.

55. (new) A sensor or solar cell configured with, at least:

a columnar body; or a columnar body having a semiconductor film arranged on a surface thereof; and

a first electroconductive wire and a second electroconductive wire in a shape that said first electroconductive wire and said second electroconductive wire are helically wound on said surface of said columnar body and separated from each other by a constant interval;

wherein said first electroconductive wire is made of a material different from that of said second electroconductive wire.

56. (new) A sensor or solar cell configured with, at least:

a columnar body; or a columnar body having a semiconductor film arranged on a surface thereof; and

a first electroconductive wire, a semiconductor wire, and a second electroconductive wire in a shape that said first electroconductive wire, said semiconductor wire, and said second electroconductive wire are helically wound on said surface of said columnar body and closely contacted with each other.

57. (new) The sensor or solar cell of claim 54, wherein said semiconductor film and/or said semiconductor wire comprises an organic semiconductor doped with fullerene.

58. (new) The sensor or solar cell of claim 55, wherein said semiconductor film and/or said semiconductor wire comprises an organic semiconductor doped with fullerene.

59. (new) A transistor configured with, at least:
an electroconductive columnar body having an insulative film arranged on a surface of said electroconductive columnar body; and

a first electroconductive wire, a semiconductor wire, and a second electroconductive wire in a shape that said first electroconductive wire, said semiconductor wire, and said second electroconductive wire are helically wound on said surface of said columnar body and closely contacted with each other.

60. (new) An optical sensor or solar cell configured with, at least:

a columnar body having a transparent electrode film arranged on a surface of said columnar body; and

an electroconductive wire in a shape helically wound on said surface of said columnar body at equal intervals;
wherein said transparent electrode film comprises ITO or PVA.